

FIBER REINFORCED COMPOSITE CORES AND PANELSAbstract of the Disclosure

A fiber reinforced core panel is formed from strips of plastics foam helically wound with layers of rovings to form webs which may extend in a wave pattern or may intersect transverse webs. Hollow tubes may replace foam strips. Axial rovings cooperate with overlying helically wound rovings to form a beam or a column. Wound roving patterns may vary along strips for structural efficiency. Wound strips may alternate with spaced strips and spacers between the strips enhance web buckling strength. Continuously wound rovings between spaced strips permit folding to form panels with reinforced edges. Continuously wound strips are helically wrapped to form annular structures, and composite panels may combine both thermoset and thermoplastic resins.